

C E R T I F I E D

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1 September 1965

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Subject: [Redacted] Project [Redacted]
Progress Report - 15 July - 31 August 1965

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Gentlemen,

Enclosed is a copy of [Redacted] Progress
Report on Project [Redacted] for the period covered
16 July - 31 August 1965.

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Very truly yours,

[Redacted]

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LHB/de

Enc: (1) P.R.

[Redacted]

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Declass Review by NIMA / DoD

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[REDACTED] PROGRESS REPORT

Period Covered: 15 July - 31 August 1965

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Document No.: [REDACTED]

Dated: 31 August 1965

PRESENT STATUS

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[REDACTED] The [REDACTED] design and detailing has been completed and all parts have been released for manufacture. A prototype of the handwheel switch assembly has been fabricated, tested, and found to be satisfactory. The cold cathode light source and dimming circuit has been delivered and tested.

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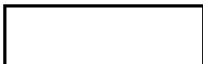
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[REDACTED] The [REDACTED] designs are complete with the exception of one or two small subassemblies. 70% of the fabricated parts have been released for manufacture; and all of the long lead purchase parts have been ordered. A test was made in the optical lab of the basic arrangement of the high intensity light sources and found to be satisfactory.

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PROBLEM AREAS

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The cold cathode light source used for general illumination was tested and found to deliver a maximum of 2,000 foot-lamberts when used with a 9,000V 30ma transformer (the largest we can fit on the base ). However, when the dimming control is added, the maximum brightness drops to about 1,700 foot-lamberts. This is somewhat less than the 1,900 foot-lamberts called for in  proposal, but is above the 1,500 foot-lambert minimum stated in the Design Objectives. If it is necessary to have the full 1,900 foot-lambert brightness, a switch could be added to the dimmer control potentiometer which would short out the dimmer circuit and apply full voltage to the lamp when the control is turned to maximum. This, however, would result in a step change in brightness of approximately 300 foot-lamberts. Comments on this would be appreciated.

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In addition, the variation of brightness as measured in our laboratory is about 15% instead of the specified 10%. We are investigating a possible solution to this, although to the writer's eye this variation is not noticeable.



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The only problem area is the relatively long lead time required for procurement and machining of some of the larger castings.

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PROJECTED WORK FOR MONTH OF SEPTEMBER

It is planned that all [] parts will be re-
leased for manufacture, and approximately 40% of the parts com-
pleted. [] 70% of the parts will be completed and some
assembly started.

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SUMMARY OF CORRESPONDENCE
DURING REPORTING PERIOD

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In a discussion [] it was pointed out that the
light sources, as proposed [] would result in a
dark stripe running across the 11 inch dimension right in the
middle of the viewing area [] indicated that we realized
this would not be desirable, and consequently, were procuring a
light source with uniform illumination throughout the viewing
area. On August 13, 1965, in a telephone conversation []
[] confirmed the correctness of our action,
and also expressed a strong preference for a single illumination
control instead of the separate controls as proposed.

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On August 13, 1965, [] indicated that the maximum
overall dimension [] with special rhomboids, was
5 inches. The [] designs are consequently based on this.

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